

**ABSTRACT OF THE DISCLOSURE**

[0058] A first copy and a second copy of a signal, which comprises a plurality of TDMA frames, are transmitted from the same antenna. Relative to the first copy, the second copy of the signal has a fixed delay and a random phase. The random phase changes from one of the TDMA frames to another of the TDMA frames. A group of hopping carrier frequencies are partitioned into at least two sets of carrier frequencies. The first copy and the second copy of the signal are transmitted using a sequence of the hopping carrier frequencies, wherein consecutive pairs of the hopping carrier frequencies for consecutive pairs of the TDMA frames are not from the same one of the at least two sets.